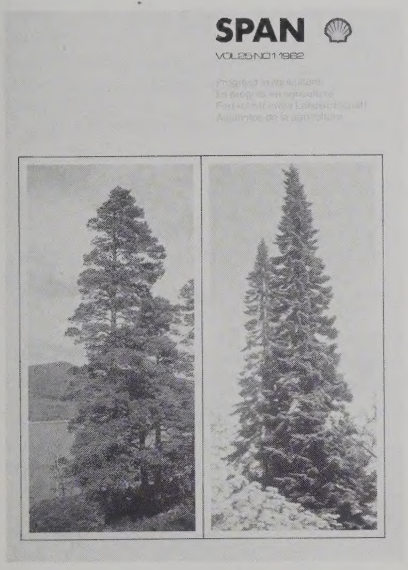
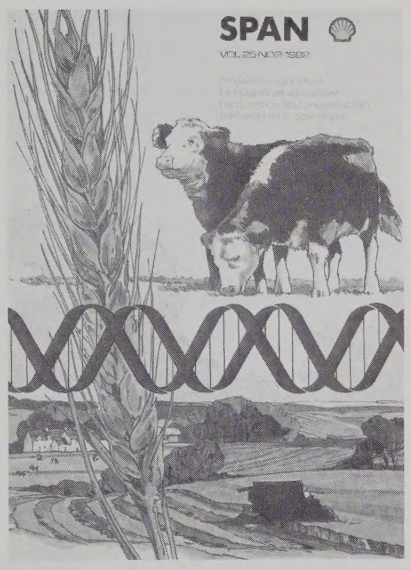
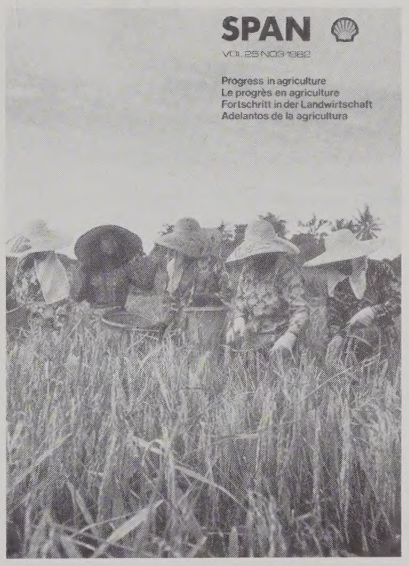
SPAN Index 1982

Volume 25 Nos 1,2,3







Author

Bailey,P.H. 18
Bines, J.A. 59
Binns, W.O. 74
Bock, K.R. 11
Burley, T.M. 33
Clark, J.A. 104
Dennett, M.D. 107
Elliott, G.K. 128
Elmslie, L.J. 35
Fenwick, G.R. 27
Fraser, R.S.S. 113
Greenwood, D.J. 102
Haddow, B.C. 66
Hobson, G.E. 21
Holdgate, D.P. 24
Hopper, B.L. 71
Hudson, J.P. 28
Huxley, P.A. 82
Ingle, J. 50
Masheder, S. 66
Monteith, J.L. 104
Nene, Y.L. 14
Pickard, D.H. 31, 68, 123
Pierce, R.T.R. 65
Polge, C. 56
Ralph, W.E. 62
Rennie, D.A. 99
Rennie, N. 121
Richter, J. 17, 70, 112
Robertson, A. 53
Rossides, S.C. 33
Seal, D.T. 2
Smith, R.O. 79
Stovell, F.R. 125
Strak, J. 132
Taylor, G.G.M. 77
Thompson, N. 109
Tipton, J.D. 71
Turner, F. 132
Venkataraman, A. 38
Wade, M. 8
Waggitt, P.W. 116
Watson, J.S. 71
Wilton, B. 117
Wood, P.J. 5

Subject

Acanthospermum spp, . .66 (fig.)
Achatina achatina, . .35 (fig.)
Actinidia chinensis, . .28 (fig.)
Acyrthosiphon pisum, . . 27
Aerial spraying, fertiliser, . .121, 122 (figs.)
  fire fighting, . .80 (fig.), 81
  herbicides, . .125 (fig.), 127
  insecticides, . .72
Africa, cereal outputs, . .97
  chickpea cultivation, . .14 (fig.), 15 (fig.), 16
  food aid, . .17
  forestry production, . .128, 129 (fig.)
  pigeon pea cultivation, . .14, 15 (fig.), 16 (fig.)
  whitefly on cotton, . .71
Agricultural support, USA, . .70
Agrobacterium tumefaciens, . .51
Agroforestry, . .7, 82, 83 (fig.), 84 (figs.)
Agrostis tenuis, . .76
Aircraft, fertiliser application and use of, . .121, 122 (figs.)
  forest fires and use of, . .80 (fig), 81
  herbicide application and use of, . .125 (fig.), 127
Alachlor, . .66 (fig.)
Alder, nitrogen fixing, soil fertility, . .3, 76
Alnus spp, . .76
Alternanthera ficoidea, . .66 (fig.)
America, forestry production, . .128, 129 (fig.)
Ammonium salts, use in forest fire fighting, . .81
Ampicillin, . .51 (fig.)
Animal breeding,
  cattle, . .56 (fig.), 57 (figs,), 58 (fig.), 60 (figs.)
  embryo transfer, . .56 (fig.), 57 (figs.), 58 (fig.)
  genetic manipulation and, . .53, 54 (fig.), 55
Animal feedstuffs, brassica crops, . .27
  milk yield and composition, . .60 (fig.), 61
  straw, . .65
Animal health, foot and mouth disease, (FMD), . .111
  lamb mortality and heat loss, . .111
  mastitis, . .60 (fig.)
  metabolism and environmental temperature, . .105, 106 (fig.)
Animal welfare, economics of changes, . .132
Apple, propagation by tissue culture, . .26
Argentina, weather monitoring and crop forecasting, . .112
Artificial insemination, cattle, . .56, 58
Ascochyta, . .16
Asia, forestry production, . .128, 129 (fig.)
  whitefly on cotton, . .71
Asulam, . .127
Atrazine, . .127
Attapulgite, . .81
Australia, cereal output, . .97
  computer use, crop production models, . .62 (fig.), 63 (fig.), 64 (fig.)
  forestry development, . .2
  legume cultivation, . .16
  weather monitoring and crop forecasting, . .112
Austria, forest fire losses, . .79 (fig.)
Auxanometer, . .105 (fig.)
Auxins, . .25, 27

b

Babaco, . .30
Bacteria, gene transfer techniques and use of, . .50, 51 (fig.)
Bangladesh, cereal imports, . .97
Barley, fungal infection, . .8 (fig.)
Bean common mosaic virus, . .114, 115 (fig.)
Bee, . .29
Belgium, forest fire losses, . .79 (fig.)
Bemisia tabaci, . .12, 71, 72 (fig.)
Benomyl, . .9
Bentonite, . .81
Benzimidazole, . .9
Bidens pilosa, . .66 (fig.)
Biological control, forestry, . .3 (fig.), 4
  insecticide use and, . .73
Bollworm, . .63 (fig.)
Book reviews
  Agricultural Compendium for Rural Development in the Tropics and Sub-tropics, ed. International Land Development Consultants, . .85
Are Pesticides Really Necessary? by Barrons, . .88
Camel, the. Its Evolution, Ecology, Behaviour, and Relationship to Man, by Gauthier-Pilters and Dagg, . .86
Domesticated Animals from Early Times, by Clutton-Brock, . .86
Energy, Biomass Options, the, by Bungay, . .87
Environmental Adaptation of Tropical Pasture Plants, by Humphreys, . .86
Mode of Action of Herbicides, by Ashton and Crafts, . .87
Pest Control in Tropical Grain Legumes, by Centre for Overseas Pest Research, . .87
Plant Disease Control, Resistance and Susceptibility, ed. Staples and Toenniessen, . .88
Post-harvest: an Introduction to the Physiology and Handling of Fruit and Vegetables, by Will, Lee, Graham, McGlasson and Hall, . .86
Principles and Practices of Rice Production, by De Datta, . .85
Progress in Pesticide Biochemistry, Volume I. ed. Hutson and Roberts, . .88
Semiochemicals. Their Role in Pest Control. ed. Nordlund, Jones and Lewis, . .87
Small Farm Development: Understanding and Improving Farming Systems in the Humid Tropics, by Harwood, . .85
Strategies for the Control of Cereal Disease, ed. Jenkyn and Plumb, . .88
Tomatoes in the Tropics, by Villareal, . .85
Vegetable Crop Diseases, by Dixon, . .88
Vegetable Productivity, ed. Spedding, . .86
Borreria alata, . .66 (fig.)
Botrytis, . .9, 16
Box scraper, . .74, 76 (fig.)
Brachiaria plantaginea, . .67
Bracken control, . .126, 127
Brassica spp, . .27, 37 (fig.)
Brassicas, glucosinolates in, . .27
Brazil, grain output, . .97
  soya bean production, . .66, 67
  weather monitoring and crop forecasting, . .112
Broccoli necrotic yellow virus, . .113 (fig.)
Brunei, soil surveying and computer use, . .116
Brussels sprouts, glucosinolates in, . .27
  virus infection, . .113 (fig.)
Butterfat, . .59, 60 (fig.), 61

c

Cabbage, glucosinolates in, . .27
  world production, . .27
Cajanus cajan, . .14
Calosomidi sp, . .37
Canada, forestry, . .2, 4
  grain output, . .97, 99, 100
  growing season, . .107, 108 (fig.)
  soil deterioration, . .99 (fig.), 100 (figs.), 101 (figs.)
  weather monitoring and crop forecasting, . .112
Carabidi sp, . .37
Carnation, propagation by tissue culture, . .24
Cassava mosaic disease, . .11 (fig.), 12 (fig.), 13 (fig.)
Cattle, dairy, milk composition, . .59 (figs.), 60 (figs.), 61
  embryo transfer, . .56 (fig.), 57 (figs.), 58 (fig.)
  metabolic rate and environmental temperature, . .106
Cattleya, . .25 (figs.)
Cenchrus contortus, . .67
Cepaea sp, . .37
Ceratocystis spp, . .4
Cereal production, Canada, . .99, 100
  fertiliser response, . .102
  India, . .39
  mechanisation, . .117 (fig.)
  varieties for different conditions, . .39, 103, 107
  weather monitoring and crop forecasting, . .112
  world, . .97
Chain-saw, . .77, 78
Chickpea, . .14 (fig.), 15, 16
China, cereal output, . .97
  weather monitoring and crop forecasting, . .112
Chinese gooseberry, . .28 (fig.), 29 (fig.), 30 (fig.)
Chlorfenvinphos, . .73
Chlorthiamid, . .127
Choristoneura spp, . .4
Chrysanthemum, propagation by tissue culture, . .24, 26
Cicer arietinum, . .14
Cichorium intybus, . .37 (fig.)
Citrus scale, . .73
Cladosporium, . .71
Climate, crop production and, . .104, 105 (fig.), 107, 108 (figs.), 109
  deforestation and world, . .1, 5
  livestock production and, . .106 (fig.)
Clover, nitrogen fixing, . .76
Clubroot, . .27
Coal, mining, . .75 (fig.)
Coconut, planting, . .39 (fig.)
Colorado beetle, . .73
Commodity market, grains, . .97
  rubber futures, . .33 (fig.), 34
Computer use, crop production models, . .62 (fig.), 63 (fig.), 64 (fig.)
  forest fire fighting, . .80
  irrigation planning, . .109
  land surveying, . .116
  marketing, . .69
  weather and pesticide use, . .111
  weather monitoring and crop forecasting, . .112
Congo, eucalyptus, . .7 (fig.)
Consultative Group on International Agricultural Research (CGIAR), . .49, 55, 98
Cotton, pest control, . .63 (fig.), 72, 73
  processing, . .71, 72
  water requirements, . .62, 63
  weather monitoring and crop forecasting, . .112
  whitefly on, . .71, 72 (figs.), 73 (fig.)
Cress, glucosinolates in, . .27
Crown gall, . .51
Cucumber mosaic virus, . .113 (fig.)
Cyanazine, . .66 (figs.), 67 (fig.), 127
Cynosurus cristatus, . .76
Cytokinin, plant tissue culture and, . .25

d

Dahlia, propagation by tissue culture, . .24
Dairy cattle, milk composition, . .59 (figs.), 60 (figs.), 61
Dairy surpluses, USA, . .70
Delia brassicae, . .27
Denmark, forest fire losses, . .79 (fig.)
Diazinon, . .37
Dichlobenil, . .127
Digitaria sanguinalis, . .67
Dimethirimol, . .9
Dimethoate, . .72
Diphenamid, . .127
Diplachne fusca, . .103
Direct drilling, soya bean, . .66
  straw burning and, . .65
Dithiocarbamate, . .9
DNA, animal, . .53, 54, 55
  plant, . .50, 51 (fig.), 52, 53, 113, 115
Dodine, . .10
Drainage, reclaimed mineral working, . .74
Drying crops, . .18 (figs.), 19 (figs.), 20
Dutch Elm disease, . .4

e

Eggs, rapeseed meal and taint in, . .27
Embryo transplantation, cattle, . .56 (fig.), 57 (figs.), 58 (fig.)
Embryogenesis, plant tissue culture, . .25
Emilia sonchifolia, . .66 (fig.)
Energy, fuel from straw, . .65
  solar for crop drying, . .18 (figs.), 19 (fig.), 20
Erysiphe graminis, . .8 (fig.)
Escherichia coli, . .51 (fig.), 52
Eucalyptus, . .7 (fig.)
Europe, cereal output, . .97
  forest fires, . .79 (figs.), 80 (fig.), 81 (fig.)
  forestry, . .2, 4, 5, 128, 129 (fig.)
  grain imports, . .97
  irrigation, . .109
  vegetable marketing, . .31, 32
  weather monitoring and crop forecasting, . .112
European Economic Community (EEC), forest products, trade, . .7, 128, 129 (fig.)
  vegetable marketing, . .31, 32
  weather monitoring and crop forecasting, . .112
Export credit fund, USA, . .70
Extension, . .38 (fig.), 39 (fig.), 49, 70

f

Feeding systems, cattle, milk composition and, . .61
Feedstuffs, milk composition and, . .61
  straw, . .65
Fertiliser use, aerial application, . .121, 122 (figs.)
  agroforestry, . .84
  application equipment, . .117, 118 (fig.), 119 (fig.)
  Canada, . .100, 101
  cereal response, . .102
  world grain output and, . .98
Fir, Douglas, . .2
Fire fighting, forests, . .79 (figs.), 80 (fig.), 81 (fig.)
Firmness meter, fruit, . .21 (fig.)
Flowers, propagation by tissue culture, . .24, 25 (figs.), 26
Fomes annosus, . .4
Food and Agriculture Organisation (FAO), . .17
Food processing, marketing systems and, . .69
Food supplies, world, . .17, 97, 98
Food surpluses, USA, . .70
Foot and mouth disease (FMD), . .111
Forestry, fertiliser use, . .121
  fires, . .79 (figs.), 80 (fig.), 81 (fig.)
  investment returns, . .1
  mechanisation of harvesting, . .77 (fig.), 78 (figs.)
  reclamation of mineral workings for, . .74, 75 (fig.), 76 (figs.)
  research, . .2, 3 (figs.), 4 (fig,), 5, 82, 83 (fig.), 84 (figs.)
  tropical, . .5, 6 (figs.), 7 (figs.)
  weed control in, . .125 (fig.)
  wood products, . .128
Forwarder, . .77, 78 (fig.)
Fosamine ammonium, . .125 (fig.), 127
France, forest fire losses, . .79 (fig.)
  snail farming, . .35, 36
  vegetable exports, . .31, 32
Freezing, embryos for transplantation, . .57 (fig.), 58
  semen, . .56, 57
Fruit, research, . .131
Fruitfly, . .70
Fuel, from straw, . .65
  from trees, . .6, 7, 78, 128, 131
Fuller's earth, mining, . .76 (fig.)
Fungal diseases, plant, . .4, 16, 26, 27, 109
Fungicides, resistance to, . .8 (fig.), 9 (fig.), 10 (fig.)
Fusarium, . .16

g

Galega sp, . .76
Galinsoga parviflora, . .66 (fig.)
Gelling agents, forest fire fighting and, . .81
Gene transfer, animals, . .53, 54 (fig.), 55
  plants, . .50, 51 (fig.), 52 (figs.), 53, 115
Genetic conservation, forestry, . .5, 6, 7
Genetic control, disease resistance in plants, . .114 (figs.), 115 (fig.)
Gerbera, propagation by tissue culture, . . 25 (fig.), 26
Germany, Federal Republic of, vegetable imports, . .31, 32
Ghana, edible snail consumption, . .35 (fig.)
Glass, crop drying and, . .18, 19 (fig.)
Glucosinolates, . .27
Glycerol, cryoprotectant, . .57
Glyphosate, . .66, 127
Goat, international dairy research centre, . .70
Goitrin, . .27
Gonadotrophin, pregnant mare's serum, . .56
Gossypium spp, . .71, 72 (fig.)
Grain drying, solar energy and, . .18 (figs.), 19, 20
Grain reserves, USA, . .70
Gravel, restored workings, . .76 (fig.)
Greece, forest fire losses, . .79 (fig.)
  vegetable exports, . .31, 32
Groundnut, weather monitoring and crop forecasting, . .112

h

Haymaking, . .18, 19 (figs.), 20
Helianthus spp, . .37 (fig.)
Helicopter use, fertiliser application, . .121, 122 (figs.)
  fire fighting, . .80, 81
Heliothis spp, . .15 (fig.), 16, 63 (fig.)
Helix spp, . .36, 37 (fig.)
Herbicide use, aerial spraying, . .125 (fig.), 127
  application equipment, . .119, 120 (fig.), 126 (fig.)
  forestry, . .125 (fig.), 126 (fig.), 127 (fig.)
  soya bean, . .66 (figs.), 67 (figs.)
Hexazinone, . .127
Hibiscus, . .71
Horseradish, glucosinolates in, . .27
Hungary, cereal production, . .97
Hylemya brassicae, . .27

i

India, agricultural development, . .38 (fig.), 39 (figs.), 40 (figs.)
  cereal output, . .97
  forestry products, demand, . .6 (fig.)
  legume production, . .14, 16
  weather monitoring and crop forecasting, . .112
Indole acetic acid precursors in brassica following clubroot attack, . .27
Indonesia, growing season, . .107, 108 (fig.)
Infra-red sensing, . .80
Inoculation, plants, . .16, 83, 115
Insect control, cotton, . .72, 73
  forestry, . .3 (fig.), 4
  India, . .40 (fig.)
Intercropping, agroforestry, . .82
International Board for Plant Genetic Resources, . .98
International Commodities Clearing House, . .34
International Council for Research in Agroforestry, . .82
International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), . .16, 40
International Natural Rubber Agreement, . .34
International Research Organisations, . .55
International Rice Research Institute (IRRI), . .98
International Service for National Agricultural Research (ISNAR), . .49
International Union of Forest Research Organisations (IUFRO), . .5
Irrigation, cereal outputs and, . .97, 98
  China, . .112
  computerised management, . .62, 63, 64 (fig.), 109
  soil fertility and, . .103
  UK, . .109
  whitefly infestation on cotton and, . .71
Isothiocyanates, in brassicas, . .27
Italy, forest fires, . .79 (fig.), 80
  snail farming, . .35, 36 (fig.), 37 (fig.)
  vegetable marketing, . .31, 32
Ivory Coast, . .6 (fig.), 7 (fig.)

j

Japan, forest products trade, . .7, 129 (fig.)
  grain imports, . .97
  radish consumption, . .27
Joboba, propagation by tissue culture, . .26
Joint Agricultural Weather Facility (JAWF), . .112

k

Kasugamycin, . .9
Kenya, agroforestry, . .84 (fig.)
  cassava mosaic disease, . .11 (fig.), 12 (fig.), 13 (fig.)
Kiwi fruit, marketing, . .28 (fig.), 29 (fig.), 30 (fig.)
Klebsiella, . .53

l

Lactose, in milk, . .59, 60 (fig.)
Lampiridi sp, . .37
Land reclamation, . .74, 75 (fig.), 76 (figs.), 103
Land survey, computer use and, . .116
Land use, agroforestry and, . .82, 83 (fig.)
  new technologies and changes in, . .49
Larch, . .3 (fig.)
Lathyrus spp, . .76
Latin America, food aid, . .17
  grain output, . .97
Legumes, nitrogen fixation and soil fertility, . .76, 102, 103
  plant improvement, . .14 (fig.), 15 (fig.), 16 (fig.)
Lepidium virginicum, . .66 (fig.)
Ligase, . .50, 51 (fig.)
Lily, propagation by tissue culture, . .26
Livestock production, agroforestry and, . .82
  animal welfare, . .132
  embryo transfer, . .56 (fig.), 57 (figs.), 58 (fig.)
Livestock, environmental temperature and metabolic rate, . .105, 106 (fig.)
Low ground pressure vehicles (LGPV), . .119 (figs.), 120
Lucerne, genetic manipulation, . .51
  nitrogen fixing and soil fertility, . .76
Lupinus arboreus, . .76

m

Maize, cultivars for temperate climates, . .107
  improved varieties, . .39
  silage, . .109, 110 (fig.)
Malathion, . .37
Malaysia, rubber trading, . .34
Manihot, spp, . .11 (fig.), 12 (fig.), 13 (fig.)
Market research, agricultural products, . .123, 124
Marketing, history of, . .68, 69
  kiwi fruit, . .29 (fig.), 30 (fig.)
  price information, . .124
  vegetables, . .31, 32
Mastitis, . .60 (fig.)
Meat, consumer preferences, . .123
  import regulations, USA, . .70
Mechanisation, application equipment, . .111, 117 (figs.), 118 (figs.), 119 (figs.), 120 (figs.)
  cultivation equipment, . .75 (fig.), 76 (fig.)
  earth moving equipment, . .74
  forestry, . .77 (fig.), 78 (figs.)
  weather and, . .112
Medicago sativa, . .37 (fig.)
Melanogromyza obtusa, . .16
Melilotus spp, . .76
Metabolic rates, environmental temperature and, . .106 (fig.)
Metalaxyl, . .9
Metaldehyde, . .37
Metolachlor, . .66 (fig.), 67 (fig.)
Milk, factors affecting yield and composition, . .59 (figs.), 60 (figs.), 61
Millet, growing season, . .108
  improved varieties, . .39
Mineral workings, reclamation for forestry, . .74, 75 (fig.), 76 (figs.)
Minimal cultivation, straw burning and, . .65
Mosaic virus diseases, plants, . .113 (figs.), 114 (figs.), 115 (fig.)
Moth, Pine Beauty, . .3 (fig.)
Mouse, genetic manipulation, . .54 (fig.), 55
Musanga cecropioides, . .7
Mustard, glucosinolates in, . .27
Mycorrhiza, inoculation, . .83
  tree growth and, . .3
Myrosinase, . .27

n

Netherlands, forest fire losses, . .79 (fig.)
  vegetable marketing, . .31, 32
New Zealand, aerial fertiliser application, . .121, 122 (figs.)
  forestry, . .2, 121
  kiwi fruit production, . .28 (fig.), 29, 30
Niger, . .107, 108 (fig.)
Nigeria, edible snail consumption, . .35 (fig.)
  growing season and choice of crops, . .107, 108
Nitrofen, . .127
Nitrogen depletion, soil, . .100 (figs.), 101
Nitrogen fertiliser use and crop response, . .102
Nitrogen fixation, . .3, 7, 16, 53, 76
Nitrogen, tomato ripening under, . .26 (fig.)
N-methyl-naphthyl carbamate, . .37
Norway, forest fire losses, . .79 (fig.)

o

Orchid, propagation by tissue culture, . .24

p

Pakistan, cereal output, . .97
  whitefly on cotton, . .71
Panolis flammea, . .3 (fig.)
Paper making, . .65, 131
Paraquat, . .66, 67, 127
Pea, cultivars of, . .107
Peanut, fungal infection, . .9 (fig.)
  weather monitoring and crop forecasting, . .112
Pendimethalin, . .66 (fig.), 67
Pepino, . .30
Pest control, computer models for, . .63, 64
  cotton, . .63 (fig.), 71, 72 (figs.), 73 (fig.)
  forestry, . .3 (fig.), 4, 84
  India, . .40 (fig.)
  legislation, USA, . .70
  pheromone use, . .3 (fig.), 4
  research, . .131
  snail farms, . .36 (fig.), 37
Pesticide use, application equipment, . .117, 119, 120 (fig.), 126 (fig.)
  weather and, . .109, 110 (fig.), 111
  world grain output and, . .98
Petunia, genetic manipulation, . .51, 52 (figs.)
Phaseolus vulgaris, . .14
Pheromones, . .3 (fig.), 4
Phyllanthus corconadensis, . .66 (fig.)
Phytophthora spp, . .4, 16, 110
Pig, embryo transfer, . .56, 57, 58
Pigeon pea, . .14, 15 (fig.), 16 (fig.)
Pine, . .2, 5
Pineapple, . .103
Pinus radiata, . .2, 121
Pisum sativum, . .14
Plant improvement, disease resistance, . .12, 113, 114 (figs.), 115 (figs.)
  forestry, . .1, 2, 3 (figs.), 5, 83
  fruit, . .30, 131
  gene transfer and, . .50, 51 (fig.), 52 (figs.), 53
  India, . .39 (figs.)
  legumes, . .14 (fig.), 15 (fig.), 16
  sorghum, . .39 (fig.)
  tissue culture and, . .26
  tomato, . .21, 22 (figs.), 23
  world cereal output and, . .98
Plant nutrition, food production and, . .102, 103
Plant propagation, . .24 (figs.), 25 (figs.), 26, 83, 84
Plasmodiophora brassicae, . .27
Plastic, solar drying of crops and use of, . .18, 19 (fig.), 20
Pod borer, chickpea, . .15 (fig.), 16
Poland, forest fire fighting, . .80 (fig.), 81 (fig.)
Polyethylene, plant protection, . .2, 19 (fig.)
  tomato storage, . .22 (fig.)
Polyoxin, . .9
Poplar, . .3
Population trends, world, . .97
Portugal, forest fire losses, . .79 (fig.)
Portulaca oleracea, . .66 (fig.)
Potato, consumer preferences, . .123
  genetic manipulation, . .51, 52
  tissue culture, . .24, 26
  yield prediction, . .62 (fig.), 63, 64
Potato blight, control, . .110
Poultry, egg taint, . .27
  improvement, . .55
  metabolic studies and heat loss, . .106
Propagation, vegetative, . .12, 13, 24 (figs.), 25 (figs.), 26, 30
Propyzamide, . .127
Prostaglandin, . .58
Pseudotsuga menziesii, . .2
Psylliodes chrisocephala, . .27

r

Rabbit, genetic manipulation, . .54, 55
Radish, consumption, Japan, . .27
  glucosinolates in, . .27
Rape, genetic manipulation, . .51
Rapeseed, poultry feed, . .27
  production, . .27
  weather monitoring and crop forecasting, . .112
Research, agricultural, . .98
  arable crops, . .131
  extension and, . .39 (figs.), 40, 49
  finance, . .70
  forestry, . .2, 82, 83 (fig.), 84 (figs.)
  fruit, . .131
  market, . .122, 123
Rhizobium inoculation, . .16, 83
Rhynchosporium, . .109
Ribulose biphosphate carboxylase, . .52
Rice, acid soil management, . .103
  improved varieties, . .39, 107
Richardia brasiliensis, . .66 (fig.)
Ripening, tomatoes, . .21 (fig.), 22 (figs.), 23 (figs.)
RNA, plant, . .50, 53, 113, 115
Root fly, . .73
Rubber, climate and cultivation of, . .109
  commodity markets, . .33 (fig.), 34

s

Salinity, soil, . .99, 100, 101 (figs.)
Sarothamnus scoparius, . .76
Satellite, observations by, . .80, 112
Scale insects, . .73
Sclerotinia rolfsii, . .9 (fig.)
Scrub control, . .126, 127
Seed collection, . .5, 83
Seed drill, . .40 (fig.)
Senegal, growing season, cultivars of millet for, . .108
Septoria, . .109
Sheep, embryo transfer, . .56, 57, 58
  genetic manipulation, . .55
  lamb mortality and weather, . .111
  metabolic rate and environmental temperature, . .106 (fig.)
Shorea robusta, . .6 (fig.)
Sida spp, . .66 (fig.), 67
Silage, maize, . .109, 110 (fig.)
Silphidi sp, . .37
Simazine, . .127
Simmondsia chinensis, . .26
Sinapsis alba, . .27
Singapore, rubber commodity market, . .34
Snail farming, . .35 (fig.), 36 (fig.), 37 (figs.)
Soil, acidity, . .103
  characteristics, herbicide use and, . .1, 3, 67
  conservation, . .82
  deficiencies, . .103
  erosion, . .5, 6 (fig.), 70, 84 (fig.), 99, 100, 101 (figs.)
  fertility, . .75, 76, 82, 100 (fig.), 101 (fig.), 102, 103
  salinity, . . 100, 103
  survey, . .116
  toxicity, . .103
Solanum americanum, . .66 (fig.)
Solar energy, crop drying and, . .18 (figs.), 19 (figs.), 20
  crop growth and, . .104, 105 (fig.)
Somatostatin, . .55
Sorghum, . .39 (fig.), 105 (fig.)
South Africa, forestry, . .2
  weather monitoring and crop forecasting, . .112
Soya bean, production, Brazil, . .66, 67
  research, . .70
  water requirements, . .62
  weather monitoring and crop forecasting, . .112
  weed control in, . .66 (figs.), 67 (figs.)
Spain, forest fire losses, . .79 (fig.)
  vegetable exports, . .31, 32
Spraying, computer management of, . .110 (fig.), 111
  drift, . .110 (fig.), 111, 117
  equipment, . .117, 118 (figs.), 119 (fig.), 120 (figs.), 126 (fig.), 127
Spruce budworm, . .4
Spruce, Sitka, . .2, 3 (fig.)
Sticky cotton, . .71, 72
Storage, fruit, . .21, 22 (figs.), 23 (figs.), 30
Straw, burning, . .65, 80
  uses, . .65
Strawberry botrytis, . .9
Sudan, marketing, . .68, 69
  whitefly infestations on cotton, . .71
Sugar beet, cultivars for different climates, . .107, 108
Sulphur dioxide, plant growth and, . .105
Sunflower, trials, . .39 (fig.)
  weather monitoring and crop forecasting, . .112
Surveying, computer use and, . .116
Swede, glucosinolates in, . .27
Sweden, forest fires, . .80
Switzerland, forest fire losses, . .79 (fig.)
Syria, meteorological measurements, . . 108 (fig.)

t

2,4,5-T, . .127
Tamarillo, . .30
Tanzania, soil erosion, . .84 (fig.)
Temperature, crop choice and, . .107, 108 (fig.)
  plant growth and, . .104, 105 (fig.)
  tomato ripening and, . .21 (fig.), 22, 23 (figs.)
Tetracycline, . .51 (fig.)
Thailand, weather monitoring and crop forecasting, . .112
Thalassemia, . .53
Thiabendazole, . .9
Thiophanate, . .9
Tissue culture, plant propagation and, . .24 (figs.), 25 (figs.), 26
Tobacco, genetic manipulation, . .51
  resistance to virus disease, . .114 (fig.), 115
Tomato, disease resistance, . .114 (fig.), 115
  growth studies, . .105 (fig.)
  ripening, . .21 (figs.), 22 (figs.) 23 (figs.)
Toxic elements in soil, . .103
Tractor, . .75 (fig.), 76 (fig.), 77 (fig.), 117 (figs.), 118 (figs.), 119 (figs.)
Tree tomato, . .30
Trichlopyr, . .127
Trifluralin, . .66 (fig.), 67
Trifolium pratense, . .37 (fig.)
Turkey, whitefly infestations on cotton, . .71
Turnip mosaic virus, . .113 (fig.)

u

UK, arable crops research, . .131
  foot and mouth disease, . .111
  forestry, . .2, 3 (fig.), 4, 81
  growing season, . .107, 108 (fig.)
  maize silage, . .109, 110 (fig.)
  rapeseed production, . .27
  vegetable market, . .31, 32
  wood products trade, . .7
Urea, . .102
Urtica dioica, . .37 (fig.)
USA, agricultural trade policy, . .70
  chickpea cultivation, . .16
  forestry, . .2, 4, 5
  grain output, . .97
  land reclamation, . .74
  meat import regulations, . .70
  weather monitoring and crop forecasting, . .112
USSR, forestry, . .3, 4, 5, 128, 129 (figs.)
  grain imports, . .97
  weather monitoring and crop forecasting, . .112

v

Vegetable marketing, Europe, . .31, 32
Venturia inequalis, . .10
Virus diseases, plant, . .11 (fig.), 12 (fig.), 13 (fig.), 24, 25 (figs.), 26, 51
  plant resistance to, . .113 (figs.), 114 (figs.), 115 (fig.)
Viruses, biological pest control by, . .4
  genetic manipulation and plant, . .51

w

Water, fire fighting additives, . .80 (fig.), 81
  plant growth and, . .62, 63, 105, 107, 108 (fig.)
Water resources, agroforestry and, . .82
  Canada, . .99, 100 (fig.), 101
  computerised management, . .62, 63, 64 (fig.), 109
  crop production and, . .109
Watercress, glucosinolates in, . .27
  mosaic infected, . .113 (fig.)
Weather, application of chemicals and, . .117
  farming and, . .104, 105 (figs.), 106 (fig.), 107, 108 (figs.), 109, 110 (figs.), 111, 112
Weed control, forestry, . .125 (fig.)
  soya bean, . .66 (figs), 67 (figs.)
Wheat, improved varieties, . .39, 107
Whitefly, . .12, 71, 72 (fig.), 73
Willow, . .131
Wood, fuel, . .1, 6 (fig.), 7, 78, 128
  harvesting, . .77 ((fig.), 78 (figs.)
  processing, . .128, 129 (fig.) 130 (figs.), 131
  world harvests, . .128 (fig.), 129 (fig.)
Wool, heat loss in sheep and, . .106 (fig.)
World trade, forest products, . .129 (fig.)
World Watch Institute, . .17

x

X-rays, pollen irradiation, . .52

y

Yields, calculations of, . .104
cereals, . .97, 102
chickpea, . .14
cotton, . .63 (fig.)
maize, . .97
milk, . .59 (figs.), 60 (figs.), 61
pigeon pea, . .14
rice, . .103
Yugoslavia, forest fire losses, . .79 (fig.)

Printed in England by Shell Reprographics, London 06996